



STAIR TREAD INSTALLATION

TECHNICAL SUPPORT 800.345.6202

A. INTRODUCTION

Please read these instructions thoroughly before installation.

B. SITE CONDITIONS

1. Store the flooring and adhesive in the installation area.
2. The temperature must be kept between 65°F and 75°F for 48 hours before, during and after installation.
3. Both flooring and adhesive must be acclimatized 48 hours prior to installation. Flooring should be removed from the pallet 24 hours prior to installation and stacked no more than 3 cartons high with at least 4" of airflow around the cartons. Do not leave boxes close to heat or cooling ducts or in direct sunlight.
4. When unpacking the tiles, some of them could have an inconsistent gloss appearance. This effect occurs during the manufacturing and packaging process and will disappear when the initial maintenance procedure is performed.
5. Avoid placing flooring in direct sunlight (windows or doors) before installation, as it could create shading.
6. Flooring products with arrows on the back must be installed with the all arrows pointing in the same direction.
7. For any problem related to chemical abatement or high humidity refer to the "Remediation Systems" document.
8. For internal use only.

C. MOISTURE TESTING

1. Follow ASTM F 710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring". This includes determining Moisture Levels, Relative Humidity and pH Levels, as per the ASTM specifications listed below:
 - a. ASTM F 1869, Anhydrous Calcium Chloride test for Moisture levels. The maximum allowable reading is 5 lbs/1,000 sq. ft./24 hours for AD-777 and AD-535 adhesives
 - b. ASTM F 2170, Relative Humidity (RH) test using in situ probes. The maximum allowable reading is 85% RH for AD-777 and 85% RH for AD-535.
 - c. ASTM F 710, pH levels (test procedure 5.3.1). The readings should be between 8 and 10.
2. The ASTM test frequency recommendation is 3 measures for the first 1,000 sq. ft. and 1

measure for each additional 1,000 sq. ft.

3. Ensure Moisture, Relative Humidity and pH tests have all been conducted according to the latest ASTM version, and measurements meet manufacturer's specifications.
4. For all grade installations (on, above or below), it is the flooring contractor's responsibility to ascertain that there is not too much moisture in the concrete and that it will not increase at a future date above the recommended levels. Expanko Resilient Flooring will not be responsible for hydrostatic pressure that may occur in the future.

D. SUBFLOOR PREPARATION

1. Concrete Steps:

- a. Concrete must be clean, dry, firm, fully cured and free of alkali or acid, curing compounds, paint, urethane, oil or solvents. Newly poured concrete steps must be cured for at least 6 weeks prior to tread installation.
- b. Fill cracks and level low or rough areas with high strength Portland cement-based patching material.
- c. AD-33 Solvent-Free Epoxy Stair Nosing Caulking Compound can be used for repairing worn or cracked steps.

2. Wooden Steps:

- a. Wooden steps must be properly nailed, clean and free of polish and wax. Replace or repair old or worn steps.
- b. Fill all surface cracks and holes with high strength Portland cement-based patching material.

3. Terrazzo, ceramic, natural/agglomerated marble or granite-type steps are non-porous materials and require special attention:

- a. Steps have a glazed and polished finish.
- b. Steps often treated with sealers and wax, which can build up. Remove glaze, polished finish, sealers and wax by sanding or bead blasting.
- c. Ensure that the surface is free of dirt, dust, debris or any other substances that may prevent bonding of the primer; then apply a coat of self-levelling Portland cement-based compound. Follow the manufacturer's instructions and cure for at least 24 hours.
- d. Apply a 1/8" to 3/16" thick layer of the above compound over the cured primer and level it.
- e. Cure for 24 hours prior to installing Sereniti Rubber Flooring products.

4. Metal Steps:

- a. The surface must be level, clean, dry and free of any coatings or foreign materials.
- b. Sand the metal (aluminium, steel, brass, copper and bronze) to ensure a good adhesive bond.
- c. We do not recommend using gypsum-based patching or levelling compounds under any circumstances.
- d. Do not use chemical adhesive removal products (chemical abatement products); their use will void the American Biltrite adhesive system warranty.
- e. Do not use an oil-based sweeping powder (green powder) to clean the floor because this product will interfere with the adhesion on the concrete.
- f. For detailed instructions, refer to the Floor Preparation document available on our web site at www.expanko.com.

E. ADHESIVE SYSTEMS

1. The use of the proper adhesive is critical to a successful end result. Expanko Resilient Flooring will only guarantee its flooring products if AD-777 or AD-535 adhesives are used.
2. On concrete and plywood steps, use AD-777 or AD-535 with AD-33 Solvent-Free Epoxy Stair Nosing Caulking Compound.
3. On non-porous substrates and metal steps, use AD-535 with AD-33 Solvent-Free Epoxy Stair Nosing Caulking Compound.
4. Protect from freezing in transit and storage.
5. Trowel specifications are written as follows: depth / width / spacing.
6. Use kneepads and work off the treads whenever possible.
7. Clean spills, oozing and tools promptly using soapy water, ethyl alcohol or isopropyl alcohol.
8. Do not reuse container. Dispose of container and adhesive in accordance with federal, provincial/state and local waste disposal regulations.
9. Do not rework trowel. Always use a trowel in good condition.
10. Contact Expanko Resilient Flooring for additional information.

AD-777 ADHESIVE

1. AD-777 can be used as a wet-set or a pressure-sensitive adhesive; it has a creamy color with a syrupy consistency.
2. **Porous surfaces:** Spread adhesive with a 1/32" x 1/16" x 1/32" U-notched trowel. Allow 0-15 minutes open time when using as a wet-set or let dry 15-45 minutes until dry to touch when using as a PSA. Working time on concrete is up to 1 hour, depending on temperature and humidity.
3. **Non-porous surfaces:** Spread adhesive with a 1/32" x 1/16" x 1/32" U-notched trowel. Allow 15-45 minutes open time until dry to touch. Working time on concrete is up to 2 hours, depending on temperature and humidity. A surface is considered porous when a drop of water is absorbed within 5 minutes.
4. Coverage: porous surfaces up to 200 sq. ft./gallon; non-porous surfaces up to 245 sq. ft./gallon.
5. We recommend the following guidelines for traffic:
 - Up to 24 hours following installation: no traffic
 - Between 24 and 72 hours: light traffic
 - After 72 hours: moderate to heavy traffic

AD-535 ADHESIVE

1. AD-535 is a two-part epoxy-based adhesive that is an off-white color when mixed.
2. AD-535 creates a very strong bond when applied to porous and non-porous surfaces.
3. Remove the lid of part A and stir using a mechanical mixer. Remove the lid of part B and pour all the content into the container of part A. Use a rubber spatula to remove everything from the container. Use a mechanical mixer to ensure proper blending, as inadequate mixing could cause bond failure.
4. Pour the entire adhesive onto the floor immediately after mixing. Do not leave the mixed adhesive in the original can; the heat generated by the chemical reaction will reduce the open time of the adhesive.

5. **Porous and non-porous surfaces:** Spread adhesive with a 0.8 mm x 1.6 mm x 0.8 mm (1/32" x 1/16" x 1/32") U-notched trowel on porous and non-porous surfaces. A surface is considered porous when a drop of water is absorbed within 5 minutes.
6. Coverage: porous surfaces up to 15 sq. m /3.79 litres (up to 163 sq. ft./gal.); non-porous surfaces up to 18.6 sq. m/3.79 litres (200 sq. ft./gal.).
7. Curing time will vary depending on site conditions (i.e. temperature, humidity). It is still workable if it is wet and sticks to the fingers when touched. If a dry skin has formed on the surface of the adhesive, remove the adhesive and start over.
8. The treads must be rolled prior to adhesive hardening with a J-type hand roller.
9. We recommend the following guidelines for traffic:
 - Up to 6 hours following installation, no traffic
 - 6 to 24 hours: moderate to heavy foot traffic
 - After 24 hours: regular rolling traffic

AD-33 ADHESIVE

1. AD-33 is a two-part solvent-free epoxy caulking compound. It prevents cracking and flexing of rubber treads by bonding uniformly to the under-step.
2. It is excellent for the complete restoration of existing concrete, wooden or metal steps, and can be used for repairing cracks, holes, depressions and worn or broken edges.
3. Directions:
 - a. Cut a 3/8" inside diameter opening in the mixing nozzle.
 - b. Remove cap and attach the mixing nozzle to the cartridge using the retaining nut.
 - c. Depress the trigger on the gun until the compound reaches the end of the nozzle.
 - d. Discard the first 1-2" of compound. Do not remove internal mixer in nozzle.
 - e. Squeeze a sufficient amount inside the nosing of the tread so that when it is pressed firmly in place, the compound moulds it to the shape of the step edge.
 - f. After installing the tread, thoroughly roll it with a J-type hand roller, especially in the nosing area. All of the tread nosing must touch the step edge to provide adequate support.
 - g. Coverage: Approx. 50 linear ft. per unit using a 1/4" diameter bead.
 - h. To save a partial cartridge or compound for future use, leave the mixing nozzle on the cartridge during storage. To use, simply replace the old nozzle with a new one.

F. INSTALLATION

General:

- Fit tread snug. Do not force treads in place.
- Gypsum-based patching or leveling compounds are NOT recommended under any circumstances.
- Avoid traffic on stairs for minimum of 48 hours.
- **Protection:** Following installation and cleanup of the treads, protect them from other sub-trades by attaching sheets of brown Kraft paper over treads using adhesive tape.



Stair tread that is laid as shown in the picture above will break at the nosing due to repetitive flexing.

Internal part of the nosing must be filled properly with AD-33 epoxy caulking to prevent any flex.

Regular Stair Tread:

1. Dry fit all treads. First scribe treads to fit steps. Second, place riser into position to fit tread nose on above step. Apply the adhesive as described in Adhesive Application. It is required that all Sereniti Rubber Flooring treads have a bead of AD-33 epoxy nosing compound applied along the inside of the tread nosing angle section and to within ¼" of the edges. This will fill any voids in the steps.
2. Press treads and risers firmly into place. Press nosing into stair so the epoxy caulking molds to the shape of the tread nose and stair.
3. Any excess adhesive on the surface of the treads or surrounding area should be removed immediately as described in the adhesive section. Adhesive cannot be removed if set.

One-piece Tread and Riser:

1. Dry fit all treads. First scribe treads to fit steps. Second, place riser into position to fit tread nose on above step. Apply the adhesive as described in Adhesive Application. It is required that all Marathon treads have a bead of AD-33 epoxy nosing compound applied along the inside of the tread nosing angle section and to within ¼" (6.35 mm) of the edges. This will fill any voids in the steps.
2. Press treads and risers firmly into place. Press nosing into stair so the epoxy caulking molds to the shape of the tread nose and stair.
3. Any excess adhesive on the surface of the treads or surrounding area should be removed immediately as described in the adhesive section. Adhesive cannot be removed if set.
4. When installing the Marathon One-Piece stair treads using AD-33 nosing compound, repeat the caulking procedure where the tread and rise intersect.

Special Instructions for Visually Impaired Treads:

1. Dry fit all treads. First scribe treads to fit steps. Second, place riser into position to fit tread nose on above step. Apply the adhesive as described in Adhesive Application. It is required

that all Sereniti Rubber Flooring treads have a bead of AD-33 epoxy nosing compound applied along the inside of the tread nosing angle section and to within ¼” of the edges. This will fill any voids in the steps.

2. Press treads and risers firmly into place. Press nosing into stair so the epoxy caulking molds to the shape of the tread nose and stair.
3. Any excess adhesive on the surface of the treads or surrounding area should be removed immediately as described in the adhesive section. Adhesive cannot be removed if set.
4. Do not flex or bend threads with detectable warning strips.
5. Cut Visually Impaired strips at least 1/8” from edge of treads.

WARNING: REMOVAL OF OLD FLOORING

Do not sand, dry sweep, dry scrape, drill, saw, bead blast, mechanically chip or pulverize existing resilient flooring, backing, felt lining, paint, asphaltic cutback adhesives or other adhesives. These products may contain asbestos fibres or crystalline silica. Avoid creating dust as inhalation increases the risk of cancer and respiratory diseases. Smokers exposed to asbestos fibres are at greater risk of serious bodily harm. Unless certain that the product is asbestos-free, assume that it contains asbestos. Regulations may require that material be tested to determine asbestos content. Consult the Resilient Floor Covering Institute’s (RFCI’s) recommendations for removal of existing resilient floor coverings.

Sereniti Rubber Flooring Pre-Installation Guidelines (*Document 010R*) and Sereniti Rubber Flooring Rubber Flooring Care and Maintenance Instructions (*Document 711ST*) are available at www.expanko.com.

For more information about Expanko visit www.expanko.com or contact 800.345.6202.